

Docket No. F-7998

Ser. No. 10/705,629

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1-3. (Canceled)

4. (New) An axial air-gap vibration motor, comprising:

an eccentric rotor comprising:

- a printed wiring board having a first side and an opposing second side;

- a commutator disposed on a first side and air-core armature connecting lands interconnected with the commutator;

- a bearing mounted in the printed wiring board at a center of rotation of the rotor;

- a first air-core armature coil disposed on the second side of the printed wiring board;

- a second air-core armature coil disposed at the second side of the printed wiring board and

Docket No. F-7998

Ser. No. 10/705,629

overlapping the first air-core armature coil in an axial direction of the rotor and shifted relative to the first air-core armature in a range of 16° to 60° ;

a third air-core armature coil disposed at the second side of the printed wiring board and so as to not overlap the first air-core armature coil and shifted relative to the first air-core armature at least about 120° ;

the first, second and third air-core armature coils being eccentrically disposed at the second side of the printed wiring board relative to the center of rotation of the rotor and interconnected with the air-core armature connecting lands; and

an eccentric weight disposed at the second side of the printed wiring board, eccentric with respect to the center of rotation of the rotor, and in a common radial plane with the second air-core armature coil;

a housing assembly including a casing and a bracket;

a shaft supported in the housing assembly and rotatably supporting said rotor via said bearing;

Docket No. F-7998

Ser. No. 10/705,629

a magnet disposed in the housing assembly so as to define an axial air-gap in conjunction with the first, second and third air-core armature coils, and the first, second and third air-core armature coils having an angle section equal to a pitch angle of magnetization of the magnet; and

a brush disposed in the housing assembly engaging the commutator so as to supply current to the first, second and third air-core armature coils.

5. (New) The axial air-gap vibration motor according to claim 4, wherein the first and third air-core armature coils are disposed in a second common radial plane.

6. (New) The axial air-gap vibration motor according to claim 5, the bearing is a sintered oil-impregnated bearing.

7. (New) The axial air-gap vibration motor according to claim 6, wherein the casing has an step portion indented with respect to an outer surface of the casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

Docket No. F-7998

Scr. No. 10/705,629

8. (New) The axial air-gap vibration motor according to claim 7, wherein the bracket has a bracket hole and the shaft has a second end disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

9. (New) The axial air-gap vibration motor according to claim 4, the bearing is a sintered oil-impregnated bearing.

10. (New) The axial air-gap vibration motor according to claim 9, wherein the casing has an step portion indented with respect to an outer surface of the casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

11. (New) The axial air-gap vibration motor according to claim 10, wherein the bracket has a bracket hole and the shaft has a second end disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

12. (New) The axial air-gap vibration motor according to claim 4, wherein the casing has an step portion indented with respect to an outer surface of the

Docket No. F-7998

Scr. No. 10/705,629

casing, the shaft has a first end disposed in a hole in the step portion and welded to the casing from outside the housing assembly.

13. (New) The axial air-gap vibration motor according to claim 12, wherein the bracket has a bracket hole and the shaft has a second end disposed in the bracket hole in the step portion and welded to the bracket from outside the housing assembly.

14. (New) The axial air-gap vibration motor according to claim 5, wherein the eccentric weight overlaps the first and third air-core armature coils in the axial direction of the rotor.

15. (New) The axial air-gap vibration motor according to claim 4, wherein the eccentric weight overlaps the first and third air-core armature coils in the axial direction of the rotor.